From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Art Searle <asearle@netusa.net>
Subject: [9430] Re:
Message-ID: <31B60ABC.1F77@netusa.net>

Tom Frank wrote:
>
>         Subscrilbe.

sent to wrong address.  Resent it to:

tentec-request@akorn.net

73, de Art WU2K
--
72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Art Searle <asearle@netusa.net>
Subject: [9442] Re:
Message-ID: <31B66792.48D3@netusa.net>

David D. Meacham wrote:
>
> Hey Art,
> I'm an NRA life member, too! I've seen at least one other one on this list.
> I think there must be quite a few hams who are at least NRA members.
> 72, Dave, W6EMD, Redwood City, CA

Ya see, you can be QRP and still have a big gun. You're the 3rd gun nut I've met
on this reflector. I wonder how fast the calls W#NRA calls will go when gate 2
opens. I think W6NRA is available.

--
72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: burdick@interval.com (Wayne Burdick)

Subject: [9432] '40A sold -- thanks for the bandwidth (eom)
Message-ID: <v02130551addbcfb28372@[199.170.106.28]>

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Gary Evans <gevans@lightspeed.net>
Subject: [9407] 40-9er Problem
Message-ID: <31B51C55.2F20@bak2.lightspeed.net>

Gang
     I just finished putting together the 40-9er this evening, but I've got a couple
of questions. The receiver seems to work okay except for the low audio which I will try
and fix with some of the suggested mods. My main concern is that when transmitting, Q3
becomes very hot, even after sending just a few characters. Any suggestions on what I
might look for would be appreciated. Another question I have is concerning the statement
at the top of page three of the instructions which says, "you should not have any empty
holes except where the connectors go." I have an empty hole! Looking at the pcb board
from the bottom (the same view as in the instructions), the horizontal trace with four
pads in the upper left-hand corner where the tuning capacitor C6 is soldered, there is a
hole directly under the tuning capacitor with nothing connected to it. Did I forget
something?? Thanks for any help you can give.

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: litigate@mi.net (litigate)
Subject: [9443] Argonaut 509 w/accs FORSALE
Message-ID: <199606060219.XAA00364@mi.net>

After alot of soul-searching, I've decided to get off of HF completely after 18
years and get on the satellites. As a result, I'm selling all of my HF gear.
I've already sold my Yaesu 990 and Drake L-4B. I thought I'd hang onto my 509,
but have decided to sell it instead, assuming someone wants to buy it. This is

the second 509 I've owned. I'd prefer to sell as a package, but I'm open to offers
on any part. Please respond by e-mail if you want to reply tonight as its 11 pm here in New Brunswick. You can phone me at work at (506) 444-6551 after 7:15 am Eastern until 4:15 pm Eastern and after that you can either get me on my cellular, which is (506) 447-9011 or home at (506) 458-1310. Here's a description
of the gear:

1. Ten-Tec 208 CW filter for 509

2. Ten-Tec 206A Crystal Calibrator

3. Ten-Tec 245 Desk Mic

4. Ten-Tec Argonaut 509

I'm pretty fussy and would give all items a 9.5 out of 10 physically and a 10 out
of 10 operationally. The 509 has three small nicks on the front, about 1 or 2 mm
each. When I got gung ho on QRP again in the Winter I sent the 509 to Ten-Tec for retuning and replacement of a few parts, including the main tuning knob. The tab was $168, but it was worth it. I'm open to offers on any or all. 73.

Rick Williams VE9HF
472 Broad St.
Fredericton, NB
E3A 5L1
CANADA

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9421] Deltas at lower heights (long, erase if uninterested)
Message-ID: <Pine.SOL.3.91.960605112409.9845A-100000@utkux4.utcc.utk.edu>

Low-Down Deltas:

More than one person has noted that my initial findings on the delta loop were based on well-elevated models, but that most (though not all) ham 40-meter deltas would likely be close to the ground at one point or more.  This is a good observation.  Initial models were made free and clear to form a baseline for knowing when data might become unreliable as we press models closer to the

ground. Even NEC's Somerfeld-Norton ground calculation system is not perfect. The closer to the ground, the more uncertain models become. There is no way to know what your particular delta loop might be strung around or amid: trees, shrubs, house wiring, children's play sets, etc.

So with the understanding that a. the closer to ground, the less reliable models become and b. the more the antenna will be influenced by things I cannot model, we can look at low down deltas. For now, we shall keep them upright (in a vertical plane). Like all the models, the antennas are made to the same circumference (1050/f (MHz)) of #12 copper wire over medium earth. We shall compare 4 versions: BOT = horizontal wire at the bottom, fed in the middle of the horizontal wire; APX = horizontal wire at the top, fed at the apex at the bottom; D25 = horizontal wire at the bottom, fed 25% up one side; and V25 = horizontal wire at top, fed 25% down one side. The reason for the choice of 25% up or down, is that this point yields the lowest angle of maximum radiation for the side-fed models.

It is hard to print a complete chart across a single screen, so we shall pair up the antennas and look at the progressions of gain (GN) in dBi, angle of maximum radiation (TO), and feedpoint impedance (Z) in ohms at a series of heights. The heights will be for the lowest part of the antenna--the uppermost part will be about 40' or so higher.

| BOT | | | | APX | | |
|---|---|---|---|---|---|---|
| GN | TO | Z | Height | GN | TO | Z |
| 6.01 | 37 | 138 - j1.5 | 35 | 7.34 | 28 | 117 - j23 |
| 5.71 | 41 | 137 + j8 | 30 | 7.00 | 30 | 123 - j24 |
| 5.43 | 45 | 132 + j18 | 25 | 6.64 | 32 | 129 - j22 |
| 5.13 | 51 | 124 + j25 | 20 | 6.29 | 35 | 135 - j17 |
| 4.67 | 57 | 114 + j30 | 15 | 5.99 | 38 | 137 - j10 |
| 3.80 | 64 | 105 + j32 | 10 | 5.73 | 42 | 136 - 1.6 |
| 1.90 | 72 | 107 + j42 | 5 | 5.50 | 46 | 131 + 5.4 |
| | | | | | | |
| D25 | | | | V25 | | |
| 1.39 | 15 | 110 - j15 | 35 | 1.17 | 14 | 108 - j11 |
| 1.44 | 16 | 114 - j20 | 30 | 1.20 | 15 | 110 - j15 |
| 1.44 | 17 | 120 - j23 | 25 | 1.21 | 15 | 113 - j19 |
| 1.39 | 18 | 130 - j24 | 20 | 1.17 | 16 | 120 - j23 |
| 1.28 | 20 | 143 - j21 | 15 | 1.08 | 17 | 130 - j24 |
| 1.12 | 21 | 162 - j8.1 | 10 | 0.93 | 18 | 144 - j21 |
| 0.84 | 23 | 191 + j28 | 5 | 0.72 | 20 | 166 - j6.7 |

So what does the data from the models mean. Here is a random list of potential conclusions:

1. There is no performance difference between the two side-fed models. Differences in gain under 0.2 dB are insignificant, and the figures grow more tentative as the base-height approaches ground level. As noted in an earlier

message in this series (which did not begin with the intention of being a series), the side-fed antennas maintain their performance over a range of base-heights. High-angle radiation (and reception potential, of course) are much reduced in both side-fed versions. Moving the feedpoint more than about +/-10% increases the high-angle radiation very quickly with increasing gain very fast (until you reach the 60% mark along the vertical wire), thus defeating the purpose of side feed.

2. At all base-heights, APX (horizontal wire at the top, fed at the apex at the bottom) provides superior performance to BOT (horizontal wire at the bottom, with the feedpoint in the center of that wire). Gain is higher (due to the horizontal wire being always higher), and the angle of max radiation is always lower.

3. The gain of APX at an angle of 15 degrees (comparable to the D25 and V25 angles of maximum radiation) has this short pattern:

| | | |
|---|---|---|
| Height = 5' | Gain at 15 degrees = | 0.48 dBi |
| 10' | | 1.30 |
| 15' | | 2.11 |

Note that by a base-height of 15', the gain at "dx" angles exceeds that of either side-fed model. However, the angle of max radiation is much higher, meaning that the antenna will respond to shorter skip comparatively strongly. For some this means more QSO possibilities, for others it means QRM on the dx contact. With the APX bottom apex at 15' up, the top horizontal wire would be higher than 55'. If you can get that wire up that high (or higher), the APX version may be the way to go. If you can't, then perhaps (assuming you just gotta have a delta loop), one of the side-feed models will fill the bill.

4. Although ON4UN's explanations of delta beam operation lack theoretical foundations, his conclusions are sound when the bottom wire has to be very close to the ground: the side-feed can out-perform the bottom feed for dx. The delta beam does not need a counterpoise or ground system. Since ground-mounted vertical losses are high in most ham installations, due to the use of short, low-Z verticals and relatively ineffective ground systems, the side-fed delta loop may outperform many of them for dx. However, it is unclear whether the side-fed delta loop, with its gain of less than 1.5 dBi can be expected (from modeling data) to consistently out-perform loaded half-wave vertical dipoles or roof-top quarterwave verticals (usually with traps) with at least 4 radials per band.

The responses to earlier modeling notes on the delta loop have been extensive, but of course, only a minority of the net members are interested. But perhaps every individual subject serves only a minority of the 1K members of the net. I can only ask the indulgence of those whose interests lie elsewhere on behalf of those who use or are contemplating building a delta.

-73-
LB, W4RNL

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Marshall Emm <75230.1405@CompuServe.COM>
Subject: [9405] error on POB
Message-ID: <960605045515_75230.1405_HHB50-3@CompuServe.COM>

---------- Forwarded Message ----------

From:    Dick Schneider, 74602,3317
TO:  Marshall Emm, 75230,1405
     (unknown), INTERNET:W0HEP@aol.com
     Roger J. Wendell, INTERNET:aq328@freenet.uchsc.EDU
DATE:    6/4/96 9:41 PM

RE:  error on POB

Apparently, I experienced a software problem and emailed you the incorrect club POB zip code. I've already posted a message to Bill Gates. Here's the correct address:

 Here's the new POB Address, located at the Sullivan Post Office just east of Jefferson and Tamarac:

 Colorado QRP Club
 POB 371883
 Denver CO 80237-1883

 Dick/AB0CD..

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: emaaro@ns.net (Earl Mead)
Subject: [9409] FIDM Compendium
Message-ID: <199606050610.XAA06172@tomcat.ns.net>

THANKS BRUCE!
Your FIDM Compendium is GREAT!!
Worth every ounce of your effort. Anyone not getting this book is a loser, especislly if you didn't get to the Daton Days Inn South 16-19 May, 96.
Again thanks Bruce for a super effort!!
72s, Earl, AB6CN

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: burdick@interval.com (Wayne Burdick)
Subject: [9431] FS by N6KR:  one unopened NorCal 40A kit (club version)
Message-ID: <v0213054faddbca604330@[199.170.106.28]>

Someone traded me a 40A kit for some other gear.  Since I already several,
I'd like to offer this one for sale.

This version of the '40A is nearly identical to the Wilderness version,
except that it has the unpainted/unscreened aluminum case.  It comes with a
34 page manual written by yours truly.

$90 or best offer, and I'll even toss in a 10-turn, 10K pot you can use for
the VFO.  I'll pay shipping to U.S. or Canada.

73,
Wayne
N6KR

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9436] Going to Fredricshaffen (DL) hamfest?
Message-ID: <6452@mtlgw.ampr.org>

Hello there,
Is there anyone out there who will be attending the hamfest from 28 to
30 JUNE at Fredricshaffen (Germany - shores of lake Constance)?
I will be there and am counting on meeting lots of QRPers.
Do send me mail if you will be there & I will try to make a sked
so that we can meet out there & discuss...!
BYE & HOPE TO MEET YOU OUT THERE... in a few weeks... :-))
73s QRO de Ravi.

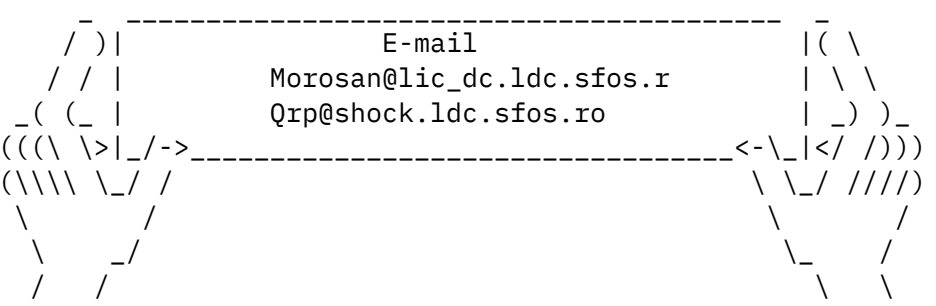
From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: alap@ncw.net
Subject: [9402] help!

Message-ID: <199606050410.VAA09690@bing.ncw.net>

Hey our local Home brew club is looking for a qrp 6 meters ssb cw transceiver, or xmter rcvr plans that we can take on for our frist project. I have not been able to find anything. So we are now looking for a ssb cw rcvr plans for 2 meters. Might you have info on either of these areas?
Thanks for your time
Al
KC7JNJ

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "Andrei Morosan" <MOROSAN@lic_dc.ldc.sfos.ro>
Subject: [9410] help!
Message-ID: <1536AB3420@lic_dc.ldc.sfos.ro>

   Hello,everybody!
   73!
   I am Andrei Morosan from Romania,member of YO3KYO.
   I have to contact Mr.George Dobbs from Britania and Mr.Jean Jibouleau from Canada.I tried to contact them using their e-mail addresses who seem not to be good anymore.
  Please,if one of you knows their addresses,send an e-mail message to me.
  mny tnx!
  72!




From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996

From: Bill Acito 05-Jun-1996 2004 <acito@asdg.ENET.dec.com>
Subject: [9438] Invitation: QRP-NE Field Day
Message-ID: <9606060006.AA04468@us1rmc.bb.dec.com>

Once again, QRP-NE will take to the field and mount a battery
powered QRP Field Day effort from under the windmills
on Mt Wachusett, north-central Massachusetts.

Less then three weeks, folks...

All QRP-NE members, and potential members, are welcome. Please
contact me if you would like directions.

All others, listen for the W1FMR effort on HF, VHF, and maybe
satellite QRP and say 'Hi'.

b

(40m Band Captain)

. . . . . - I own my own words - . . . . . .

Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS qrp-ne qrp-l arci norcal amsat-na arrl-life

Listen for me on weekend and weekday lunchtime passes of AMRAD-OSCAR 27
(32 NA Grids, 3 EU, and 22 States Worked from FN42)

From owner-qrp-l@Lehigh.EDU Wed Jun 5 23:10:06 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9406] KL7
Message-ID: <199606050520.FAA22270@chuck.dallas.sgi.com>

NL7SA 0515Z 10.120 June 5, 1996

No, not yet but close.
--
Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO TMPS 1996 Qs=021 States=15 Confirmed=07 DX=01

AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "rohre" <rohre@arlut.utexas.edu>
Subject: [9433] Missing posts in Digest 380?
Message-ID: <n1378125030.78711@msmailgw1.arlut.utexas.edu>

Pardon the bandwidth,
but did anyone else getting Digest 380 notice the messages that numbered 9372 thru 9375 inclusive were not there, and several blank pages were?  Or did the Net deliver some damaged packets to me? ( I thought packets were always hand-shook, and verified before accepted.)

Thanks,
Stuart K5KVH
rohre@arlut.utexas.edu

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: [9435] N6GA's e-mail address
Message-ID: <19960605.230920.7863.1.k7yha@juno.com>

Thanks to all for Cam's e-mail address.

72 rich k7yha

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: [9403] N6GA's e-mail address needed
Message-ID: <19960605.040525.4935.0.k7yha@juno.com>

Anyone have Cam Hartford's e-mail address? If so, please pass it along to me.
tnx

72 rich k7yha

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Steve Miller <kg7pv@teleport.com>
Subject: [9408] Need help on Norcal 40A vfo range

Message-ID: <1.5.4.32.19960605064623.0067460c@mail.teleport.com>

Hi All, was helping a new local ham Rick (what was your call??) align his Norcal 40A tonight. It worked great on initial pwr up, and we set the low end of the vfo to 7.100 (after taking 3 turns off L9 to 59 turns). Putting out a tad more than 2 watts and seems to receive fine. We discovered that the vfo range was only 5 khz and so tried several replacements for C49 - the original value was 39 pF (I get 30 khz spread on my NC40 with that value). We could increase the tuning range up to 20 khz with a 100 pF cap and the vfo would not run with a 150 pF. Seems like there must be something else we could check and I am stumped. All the parts are in the right places and the RIT works. I didn't check the values of R20 and R19 tho now that I look at the schematic....ideas?? 73 and thanks.

Steve Miller KG7PV
Portland, Or (packet kg7pv @ k7iqi.or.usa.noam)
Norcal # 308, QRP-L #109

From owner-qrp-l@Lehigh.EDU Wed Jun 5 23:10:06 1996
From: John Shuster <jshuster@silverlink.net>
Subject: [9423] New OHR Kits and Details
Message-ID: <199606051613.JAA08207@oly.olympic.net>

-- [ From: John Shuster * EMC.Ver #2.5.02 ] --

To All:

Here are details from Dick on the new OHR kits that will be available at special prices during our group buy.

/ / / O H R 1 0 0 / / /

The new OHR100 features include: Bands - 20, 30, 40, 17 or 15M; 5W output - adj from 0 to 5W; pre-mix VFO with highside LO injection on all bands except 15M; Very stable varactor tuned VFO with high quality pot covering 70 KHz; RIT; HP AGC circuit; new double tuned bandpass filter in receiver front-end; New true sine-wave sidetone oscillator with freq & level adj; 4 pole cohn IF filter adj from 300 - 1600Hz; All wiring to PC board is terminated with pre-assembled Molex connectors. The OHR100 will replace the Explorer II.

/ / / D D - 1 FREQUENCY COUNTER / / /

The DD-1 is a 6-digit 50 MHz frequency counter/digital dial.  Some features include: RED six  digit display, .3 inch digits; fast update rate for quick response; greatly reduced last digit jitter;  Sixteen non-volatile stored offset and mode programs; very easy to program in offsets,  automatic display blanking, 100Hz or 1KHz resolution; separate inputs for direct and programmable; reverse counting for reverse tuning VFO,s.  Supplied complete with cabinet.

I'll announce the group buy with all the details next week.

73,

John Shuster
KC7CKP

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Jeff Gold <JMG@tntech.edu>
Subject: [9427] Norcal 40A stiffening
Message-ID: <01I5JUO1OXIAJ1H7QJ@tntech.edu>

I agree with Wayne. On the Wilderness 40A I use very frequently, there is NO problem at all. Everything is very solid and I am secure in the way it is together.

72
Jeff, AC4HF

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "John W. Jomp" <johnj119@MO.NET>
Subject: [9434] Ramsey AF-1 CW Audio Filter
Message-ID: <31B63257.AE6@mail.mo.net>

Hi Gang:

     Has anyone built and used the Ramsey Mini Mite AF-1 CW audio filter kit ? Any comments, suggestions, complaints would be appreciated before I start  on this project. Does anyone know of any reviews for this kit?
Thanks to all !

    73 from John N0UIQ

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: lve1@inel.gov (Larry V East)
Subject: [9419] Repeats?
Message-ID: <2.2.16.19960605143026.51ff535c@eloi>

I noticed several repeated posts in yesterday's digest (6/4 postings) -- one from as far back as 5/21. Also, the second half of the digest was entirely empty. Wonder what's happening??

Oh well... guess I'll FTP it from the archives and see if the missing stuff is there.

72, Larry.

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: BWHITTEM@mailgw.sanders.lockheed.com
Subject: [9417] Re[2]: Haggis, etc, etc, etc, . . . . . .
Message-ID: <1b5927d0@mailgw.sanders.lockheed.com>

"one of lifes little pleasures"? tell that to the bull
wb1edi
barry

_____ Reply Separator _____
Subject: re: Haggis, etc, etc, etc, . . . . . .
Author:  QLF%mimi@magic.itg.ti.com at INTERNET
From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9437] Search> WWW list compiled by W2UK
Message-ID: <6454@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU     [Geneva - JN36BE - 45 6N  6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO:

Hello,

I am looking for the WWW ham-radio sites list compiled by W2UK. If you have

other sites worth checking out I would be grateful for a copy.

THANKS & hope that someone can send me that list...

73s from Ravi.

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: lve1@inel.gov (Larry V East)
Subject: [9425] St. Louis Tuner Notes
Message-ID: <2.2.16.19960605165709.25af4504@eloi>

The following probably belongs under "in case anyone is interested"...

For what its worth, the 200 Ohm film resistors supplied with the kit will work just fine for a dummy load -- with no indication of reflected power -- PROVIDED they are NOT mounted on the PC board but rather grounded directly to the case. I suspect that those who switched to carbon composition resistors and found that they no longer got an indication of reflected power did NOT mount them on the PC board because of their large size. Anyway, there is no need to scrounge the country-side looking for 2W carbon composition resistors to use for the internal dummy load.

I suspect that board mounted resistors will work OK if a simple mode is made to the PC board to improve grounding. Looking at the large PC board layout drawing in the manual, notice that the ground trace makes a right-angle turn at the upper right-hand corner of the board, just above where the dummy load resistors attach to it. Solder a piece of solder braid or tinned wire (use smaller gauge than the stuff supplied with the kit) to the ground trace at this point and loop it around the mounting hole in the upper right-hand corner. Also make sure any paint is removed from the (inside of the) case where the metal standoff attaching to this hole is mounted.  This will provide a more direct grounding path for the dummy load resistors and may well solve the problem. If someone tries this, please report the results back to the group. (Enquiring minds wanta know...)

A few simple mods that I made to my tuner (in addition to what are essentially corrections already posted by others) that may be of interest (geezzz, I can't build anything without making a FEW changes!):

1. I configured the OUT/TUNER/DL switch so that the antenna is grounded when the dummy load is switched in. This is just for my convenience so that I don't have to always disconnect and ground the antenna when not in use. Note that if both "coax" and "balanced" antennas are in use, the rear panel switch determines which one gets grounded.  -->IMPORTANT<-- do **not** rely on this mod to "save your butt" during a thunderstorm -- ALWAYS disconnect

and ground antennas when thunderstorms are a possibility!

2. I added 20K 1W "bleed" resistors from the three five-way binding posts for "wire" and "balanced" antennas to ground. Any size resistors above 10K should be OK, and 1/2W should be OK as well. You might want to use 100K or so if you expect to use really high impedance (>1000 Ohm) antennas. I add such resistors to all of my tuners and rigs; the purpose is to "bleed" any static build-up on the antenna (from blowing dust or what-ever) to ground. You folks living in wet climates may never have experienced static build-up on antennas... it can be a "real shocker"!

3. Instead of connecting contact #1 of the inductor switch directly to the junction of the two tuning caps, I put an inductor consisting of 5T of #22 wire on a T37-2 (a yellow one -- think its a #2) to give about 0.15 mH between the switch and the caps. This is just so a little inductance is in the circuit when all of the turns of L1 are shorted by the switch -- I figured that 0 (or close to 0) inductance to ground wouldn't be too useful.

4. I used RG-174 coax from the PC board to the OUT/TUNER/DL switch and from this switch to the toggle switch on the rear panel; shield braid grounded at both ends. This resulted in a "deeper" null when tuning and antenna (no difference when internal dummy load is used); probably eliminated some pickup by the PC board components when bare wire was used between the front and rear panels. I didn't use coax to connect to the dummy load or from the input connectors to the PC board as these runs are very short and don't pass over the PC board (my PC board is mounted on the left-hand side of the case toward the back and the dummy load resistors are mounted to the right of the board toward the front).

All mods performed based on my input are at your own risk -- I take no responsibility for your foul-ups!

The tuner works great; even tunes my 160M antenna (which is pretty close to 50 Ohms; probably does not have much range on 160M due to the size of the tuning caps).

Summer has finally arrived in SE Idaho, so I plan to occupy myself with yard work, camping, etc. (and hopefully occasional operating). You therefore won't have to put up with many more of my "random ramblings" about mods, etc. until next winter!

Hope to work ya on field day -- if it ain't too hot and the winds ain't too strong and I don't drink too much beer!

72, Larry W1HUE (Idaho)

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Clark Fishman (FSAC) <cfishman@PICA.ARMY.MIL>
Subject: [9411] Stores in England
Message-ID: <9606050740.aa04030@COR6.PICA.ARMY.MIL>

I have a friend staying in London for several weeks and would
like to give him info on stores that carry electronic and radio
related parts.  I know that there is Circik (spelling) and
I think Mainline...but I need there addresses and phones if possible
and If you know of others that would be great.  The fellow in London
is a ham...

Clark Fishman  WA2UNN   cfishman@pica.army.mil

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: [9404] The K7YHA 1996 North American Tour
Message-ID: <19960605.040525.4935.1.k7yha@juno.com>

It's true! What was the U.S. Tour has now become the North American Tour!

Since we are going down to San Diego to see our son, we are going to
venture into Mexico. Unfortunately, I will not have enough time to get
an XE recip license (or a new tatoo...!).

However, we are going back via Southern Canada so I will be signing VE7,
VE6, etc. during the trip home.

Plans call for use to leave about 2AM (EDT) June 15th heading south to
Raleigh, NC. After a brief visit with AA4XX and some of the NC QRPers,
we'll head out I-40 toward California.

I'll use some of my sleep time to make QSOs on each leg of the trip. I
have designed a special QSL card for the occasion. Only QSOs made on 40
meters (around 7040) from the car will count. I have no way of knowing
when I will be on the radio, so it will be catch-as-catch-can. I'll look
forward to working as many of you as I can. Paul, AA4XX will post a brief
mssg on the list when we leave his QTH and start out across I-40.

Rig will be a NorCal 40-A, about 3.5 watts output (using the aux 13.8 VDC
jack in the back of the 'ROO). Antenna is a 40 meter Hamstick on a
tri-magnet mount on the roof of the Outback.

10 Days and counting!

72 rich k7yha

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9441] Tilt! (deltas again--you know the erase routine)
Message-ID: <Pine.SOL.3.91.960605204706.17176I-100000@utkux4.utcc.utk.edu>

Deltas tilted and flat

Hate to keep this up, but I have also been asked by a couple of folks what happens if I lay out a delta loop horizontally or tilted. I suspect that a tall tree or tower in the yard makes this a tempting layout. So I took my trusty #12 copper delta loop 1050/f (MHz) long total over medium S-N ground on a NEC-2 journey through tilt-over. Actually, I took two models: BOT with the horizontal wire down and fed in the middle of the lower wire, and APX with the horizontal wire up and fed at the lower apex. Here is what happened (with the usual cautions about being unable to account for yard clutter, etc.). All gain figures are broadside to the face of the loop or, when horizontal, along the axis from the apex through the middle of the top/bottom wire.

BOT: I laid this model over to horizontal at both 35' (a typical height) and at 75' (a convenient tall height about where the peak of the upright delta was in the earliest models). I not only recorded the max gain, but also the gain at 15 degrees, the approximate optimal angle of max radiation for the side-fed models.

| Height | Max Gain | TO angle | Z | Gain at 15-deg angle |
|---|---|---|---|---|
| Upright | 6.01 | 37 | 138 - j1.5 | 2.28 |
| 35' | 6.23 | 81 | 144 + j23 | -1.80 |
| 75' | 7.16 | 26 | 97 - j11 | 5.30 |

APX: The model fed at the apex (down) with the horizontal wire up can also be laid out horizontally.

| Height | Max Gain | TO angle | Z | Gain at 15-deg angle |
|---|---|---|---|---|
| Upright | 7.34 | 28 | 117 - j23 | 5.24 |
| 35' | 6.05 | 85 | 151 + j14 | -2.09 |
| 75' | 6.91 | 26 | 99 - j16 | 5.05 |

In fact, there are no significant differences between these two models, which differ essentially only in whether they are fed at an apex or at a wire center. However, notice the height necessary to produce significant low angle radiation. 75' is just a little more than a half-wavelength at 7.15 MHz.

I then tilted each antenna at a 45 degree angle to earth and modeled it with a base height of 35' and again at 10' off the ground. The top heights were 65'

and 40' respectively.  Here's what I got:

BOT (feedpoint center of wire, which is at lowest point):

| Height | Max Gain | TO angle | Z | Gain at 15-deg angle |
|---|---|---|---|---|
| 35' | 5.89 | 46 | 144 + j2.3 | 0.76 |
| 10' | 4.52 | 79 | 102 + j42 | -4.12 |

APX (feedpoint at apex, which is at lowest point):

| Height | Max Gain | TO angle | Z | Gain at 15-deg angle |
|---|---|---|---|---|
| 35' | 6.35 | 34 | 131 - j29 | 3.11 |
| 10' | 5.79 | 62 | 134 + j18 | -0.78 |

Note that the tilted APX outperforms the tilted BOT, which is consistent with the previously reported model performance of the upright deltas.  In both cases, performance is somewhere between the vertical and horizontal performance.  The lower the antenna bottom, the higher the angle of maximum radiation and the less radiation at low dx angles.  And what applies to transmitted radiation angles applies equally to reception angles.

You can interpolate reasonable numbers for angles other than 45 degrees. Whether the performance is good or bad depends upon your standard of comparison.  Remember that receivers for 40 meters have excess gain.  So a low gain antenna is does not mean no contacts.  The noise goes down with the gain, so the signal to noise ration remains relatively constant.  Now, if the pattern is narrowed so that the antenna does not pick up noise from every possible direction in the hemisphere around it, then the signal to noise ratio is improved.  One factor, previously unnoted, about the 25% up-the-side-fed deltas is the relative flatness of their patterns, with decreased noise pickup from higher vertical angles.  That may contribute to their utility as weak signal antennas, if the operator increases the receiver gain.  (Internal receiver noise will never be a problem on 40 meters as it can be on 10.)

But the question remains, what is an appropriate standard against which to judge a delta loop?  A low dipole?  A high dipole?  A ground-mounted vertical? A rook-mounted vertical?  A loaded vertical dipole?  Hmmm, back to the software. . .

-73-
LB, W4RNL

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: weinfurtner@ouvaxa.cats.ohiou.edu (Greg Weinfurtner)
Subject: [9413] TMPS(Thirty meter prop study)
Message-ID: <v01510101addb2579f743@[132.235.72.11]>

Gang,
        Listening from SE Ohio, Athens, I was hearing at least three stations from the former USSR. (U prefixes)  I tried in vain to work the UX0ZZ on 10.112 mhz, at about 0130UTC, tho I did spot it on our local packet network.  ( My ionospheric blistering 5 watts must have damaged ZZ's front end...)
        The signals weren't "watery" sounding like I've heard signals over the pole before on 20mtrs.  Not sure of the direction of propagation, I am just using a sloping dipole.

73 de


```
*************************************************************************
*                                                Greg Weinfurtner AEE BSS  *
*      NN    N   SSSSSSS   8888888   OOOOOOO     Electronic Design Splst   *
*     N N   N   S         8     8   O     O      Ohio University   Athens  *
*    N  N  N   SSSSSSS   8888888   O     O      GO BOBCATS!               *
*   N   N N         S   8     8   O     O                                 *
*  N    NN   SSSSSSS   8888888   OOOOOOO                                  *
*                                        Can thou send forth lightnings  *
*              Amateur Radio             that they may go and say unto   *
*                                        thee, 'Here we are'? Job 38:35  *
*    weinfurtner@ouvaxa.cats.ohiou.edu                                    *
* http://ouvaxa.cats.ohiou.edu/~weinfurtner                               *
*************************************************************************
```


From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9440] want WWW list by WU2K not W2UK sri fr err
Message-ID: <6469@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU     [Geneva - JN36BE - 45 6N  6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO:

Hello,

SORRY FOR THE MISTAKE WITH THE CALL-SIGN "wu2k" AND NOT "w2uk".

I am looking for the WWW list compiled by WU2K.

73s from Ravi.

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "Mark S. Adams" <msadams@acsu.buffalo.edu>
Subject: [9424] Re: Deltas at lower heights (long, erase if uninterested)
Message-ID: <31B5DC42.124@acsu.buffalo.edu>

Great work LB, and hello to the gang,

I think that the low height deltas should be of great interest to most of us, especially the guys who like /P operations. This antenna is a good one to consider as it requires only one high support and can be tilted if necessary to conserve the vertical height you do not have all of the time. It gets a full wave lenght of with up for the lowest band you are working and can be fed with ladder line to work a bunch of bands! Now if you only have just so many nice trees and want a bunch of good single band antennas this could be your ticket. Consider the low height delta. And read the W1FB article in QST, 10/84?

--
72's de Mark, aka N2VPK

TMPS  1996 Q's=52  WAS=19  Confirmed=00  DX=08
AL CA CO CT IN FL KY MA MI MD ME NC NY PA SC SD TN TX WI WY
CT3 EA ES HC LY OZ VE1 6W1

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Bill Acito 05-Jun-1996 1348 <acito@asdg.ENET.dec.com>
Subject: [9426] Re: Deltas at lower heights (long, erase if uninterested)
Message-ID: <9606051745.AA05262@us1rmc.bb.dec.com>

I agree with Mark.... keep it coming LB.

b

40m Band Captain for W1FMR QRP-NE Field Day
(who's planning a delta loop beam for Field Day).

. . . . . - I own my own words - . . . . . .
Bill Acito
acito@asdg.enet.dec.com

|d|i|g|i|t|a|l|  Digital Equipment Corporation  Hudson, MA

KC1GS  qrp-ne qrp-l arci norcal amsat-na arrl-life

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [9429] Re: dummy Load resistors
Message-ID: <199606051933.PAA19913@nss2.CC.Lehigh.EDU>

To add my 2 cents worth and confound confusion,
You can get wire wound resistors that are NON-INDUCTIVE.
The wire is wound in a bifilar fashion so that inductance
 cancells out.
 I have seen TTFD antennas made with these resistors.
JIM VE3DDY

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Art Searle <asearle@netusa.net>
Subject: [9444] Re: Earnhardt
Message-ID: <31B66AFA.7076@netusa.net>

Hi Monte,

Good to hear from you.

Monte Stark wrote:
> Well, I see that Dandy Dale has a 115 point lead
> over Jarrett. (That bent radius rod didn't hurt
> one Dale at all!)

As of this past Sunday, Jarrett dropped to 4th 215 points behind
Earnhardt. Terry Labonte is in 2nd 136 pts behind and that rotten kid
(my wife Ann's pet name for Gordon) is in 3rd.

>
> Changed my 650 over to .45 ACP last night. Man,
> what a bunch of parts to change. But at least
> all seems ok. Have the powder throwing 5.3g of
> Unique (sp) and will be using a 180 Gr swc.

You gotta get separate tool heads.

>
> Will try to get a few through the gun tonight just
> to be sure they function OK. Have a class Sat and
> need a min of 250 rds. And my wrist is too sore to
> handle heavy loads, so I'm hoping the 180Gr do the
> trick for me!
>
> Gotta get back to work, cul,

I find 200 gr SWCs can be loaded fairly light and still
be real accurate. You can get em going down to 700 fps
and shoot all day.

72, de Art

--
72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Art Searle <asearle@netusa.net>
Subject: [9445] Re: Earnhardt  - oooops!
Message-ID: <31B671A7.43E8@netusa.net>

Sri Gang,

I forgot to turn off the CC feature for the few messages.

I especially apologize to Monte, now everyone knows we're shooters.

> 72, de Art
>
> --
> 72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
> QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
> NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
> NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

--
72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "Diana, Gary M" <gmd@rfpo1.rfc.comm.harris.com>
Subject: [9415] Re: Frequency Counter for NorCal40
Message-ID: <31B58CAF@smtpgate.rfc.comm.harris.com>

There were some questions about the frequency counter for the
Norcal 40 by W6QIF.  I built one of them for my epiphyte I, and it's a
neat counter.  If you do not have the docs for the counter chip, look
here:

http://www.semi.harris.com/datasheets/daq/icm7217/

I made a mod to Jim Pepper's circuit, so that I could get another digit of
resolution.  Email me for the details if you are interested.  I bought my
chip(s) from digikey, but I think DC electronics and Jameco also carry
them.

BTW, I built a PCB enclosure around mine to descrease the digital noise
getting into the receiver, and it seems to work.  You can hear a slight hint
of digital noise when the antenna is pulled off the radio (or when the
band is dead).  One more thing, if you order the board from FAR, be sure
to be specific about which W6QIF frequency counter board you want!
Jim Pepper had another freq counter article in that issue of QRPp; it
was for his neat DC transciever and used a different counter chip!

73 for now.
 - Gary N2JGU
   gmdsr@vivanet.com

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [9439] Re: Going to Fredricshaffen (DL) hamfest?
Message-ID: <2.2.32.19960604231931.00b0af44@public.compusult.nf.ca>

Ravi,

Post a "QRP" style report on the happenings in the Fredricshaffen QRP world
- new toys that you've spotted etc.

Tnx 73/72 Bob VO1DRB/WA6ERB

At 19:19 6/5/96 EDT, you wrote:

>
>Hello there,
>Is there anyone out there who will be attending the hamfest from 28 to
>30 JUNE at Fredricshaffen (Germany - shores of lake Constance)?
>I will be there and am counting on meeting lots of QRPers.
>Do send me mail if you will be there & I will try to make a sked
>so that we can meet out there & discuss...!
>BYE & HOPE TO MEET YOU OUT THERE... in a few weeks... :-))
>73s QRO de Ravi.
>
>


 _____________________________________________________________________
|  Bob Gobrick - VO1DRB/WA6ERB/VE2DRB -  Newfoundland, Canada         |
|  QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP      |
|       Internet:    rgobrick@nfld.com                                |
|                    bgobrick@nlnet.nf.ca                             |
|       Compuserve:  70466.1405@compuserve.com                        |
|_____________________________________________________________________|


From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: QLF%mimi@magic.itg.ti.com
Subject: [9414] re: Haggis, etc, etc, etc, . . . . . .
Message-ID: <9606051308.AA21454@itg.ti.com>

From: Brad Bradfield    QLF

Subj: re: Haggis, etc, etc, etc, . . . . . .

. . . . . but have you fine gentlemen in Scotland ever eaten Rocky Mountain Oysters?  Also known as calf fries or bull fries?  One of lifes little pleasures.

73's

Brad, WB0CGH


**********
Brad Bradfield, PE                    Electrical Design Engineer
(H) 817-321-2960                      Texas Instruments, Inc.
(W) 214-462-6230

QLF@MSG.TI.COM
WB0CGH@WO5H.#DFW.TX.USA.NA
ARRL Life Member    QRP-L #377    SMIRK #4906    IEEE(M)    ARS #72
Collector of wireless and landline Morse keys and accessories.
**********

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [9418] re: Haggis, etc, etc, etc, . . . . . .
Message-ID: <Pine.SUN.3.90.960605070312.25757A-100000@vortex.sage.dri.edu>

On Wed, 5 Jun 1996 QLF%mimi@magic.itg.ti.com wrote:

> From: Brad Bradfield    QLF
>
>
> . . . . . but have you fine gentlemen in Scotland ever eaten Rocky Mountain
> Oysters?  Also known as calf fries or bull fries?  One of lifes little
> pleasures.
>

Tain't no little pleasure for the calf.....!  :-)

73, Ron,

.........KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu...........Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: bowman@montana.com (robert bowman)
Subject: [9446] re: Haggis, etc, etc, etc, . . . . . .
Message-ID: <199606060336.VAA20697@paw.montana.com>

>From: Brad Bradfield    QLF
>. . . . . but have you fine gentlemen in Scotland ever eaten Rocky Mountain
>Oysters?  Also known as calf fries or bull fries?  One of lifes little
>pleasures.

if not, be advised that the annual western Montana Testicle Festival will be at the Rock Creek Lodge on the third weekend of September. bring your plates and tankards.

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [9412] Re: help!
Message-ID: <Pine.OSF.3.91.960605084200.7931A-100000@saturn.acs.oakland.edu>

On Tue, 4 Jun 1996 alap@ncw.net wrote:

> Hey our local Home brew club is looking for a qrp 6 meters ssb cw
> transceiver, or xmter rcvr plans that we can take on for our frist
> project. I have not been able to find anything. So we are now looking
> for a ssb cw rcvr plans for 2 meters. Might you have info on either of
> these areas? >

I think for $100 you can't go wrong with the TenTec 6M transverter kits.
For a club project, you may want the less expensive TenTec 6M receive
converter kit.

73 =paul= wb8zjl

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: N9DD@aol.com
Subject: [9428] Re: New OHR Kits and Details
Message-ID: <960605153110_211135572@emout18.mail.aol.com>

In a message dated 96-06-05 12:14:33 EDT, you write:

>
> / / /    D D - 1  FREQUENCY COUNTER   / / /
>
>The DD-1 is a 6-digit 50 MHz frequency counter/digital dial.

Gee, I like the sound of that model number! I'll bet K8DD does too.

Tom    N9DD  QRP-L #32
South Bend, IN
Member of: QRP-ARCI, CQC, G-QRP, MI-QRP, NorCal

N9DD   TMPS  1996 Qs=020  States=13  Confirmed=02  DX=02
CA CO IN MA MD MN NH NJ NM NY OK PA TX

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996

From: "Mark S. Adams" <msadams@acsu.buffalo.edu>
Subject: [9416] Re: TMPS(Thirty meter prop study)
Message-ID: <31B5BB38.5DFE@acsu.buffalo.edu>

Hi Gary and Gang,

Gary noticed that the signals from over the pole last night were not watery.
Does anyone know why not?

I noticed the same and with 3 Watts worked EA8, LY2 and ES1. Got SP2 the
previous nite. All worked between 0000Z and 0330Z. Seems that these guys work
mini pileups then call CQ after a few minutes making them easy pickins for a
QRPer!
--
72's de Mark, aka N2VPK

TMPS  1996 Q's=52  WAS=19  Confirmed=00  DX=08
AL CA CO CT IN FL KY MA MI MD ME NC NY PA SC SD TN TX WI
CT3 EA8 ES1 HC2 LY2 OZ7 VE1 6W1

From owner-qrp-l@Lehigh.EDU  Wed Jun  5 23:10:06 1996
From: Kevin Muenzler <wb5rue@amsat.org>
Subject: [9420] RE: TMPS(Thirty meter prop study)
Message-ID: <01I5JN26VCDK004M4K@ARWEN.UTHSCSA.EDU>

On Wednesday, June 05, 1996 11:52 AM, Mark S. Adams[SMTP:msadams@acsu.buffalo.edu]
wrote:
>Hi Gary and Gang,
>
>Gary noticed that the signals from over the pole last night were not watery.
>Does anyone know why not?
>
>I noticed the same and with 3 Watts worked EA8, LY2 and ES1. Got SP2 the
>previous nite. All worked between 0000Z and 0330Z. Seems that these guys work
>mini pileups then call CQ after a few minutes making them easy pickins for a
>QRPer!
>--
>72's de Mark, aka N2VPK
>
>TMPS  1996 Q's=52  WAS=19  Confirmed=00  DX=08
>AL CA CO CT IN FL KY MA MI MD ME NC NY PA SC SD TN TX WI
>CT3 EA8 ES1 HC2 LY2 OZ7 VE1 6W1
>
>

The reason that signals ARE watery and fluttery over the pole is because of the

intense
ionization and turbulence of the ionosphere over the poles. In times of very low solar
activity the ionization drops so that the turbulence is not noticed as much. In the Summer
and Winter months when the pole is either in or out of the sun all the time turbulence
of the ionosphere due to thermal factors is also reduced because the atmosphere does not
heat up and cool down causing convection currents. We are getting into Summer so the
North Pole is in the sun all the time now. Hope this helps. BTW, what frequencies do
you operate for TMPS? Is it at the top or bottom of the band? I just finished a 30M QRP
rig and would like to play too.

Kevin, WB5RUE
wb5rue@amsat.org

From owner-qrp-l@Lehigh.EDU Wed Jun 5 23:10:06 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [9422] Re: Voltage Standards continued
Message-ID: <Roam.3.0.833990138.31073.myers@bigboy>

>
> At the suggestion of several from the list I tried
> the Silver Oxide batteries typical of use in watches.
>
> Everyready Energizer (R) #391 1.5V measured two
> at 1.600V and 1.603V respectively. If anyone has/buys/
> or measures one of any types of Silver Oxide send me the
> data. I'll summarize.

The mercury batteries used in cameras and exposure meters have a very accurate initial voltage, a long shelf life, and a very flat discharge curve, essentially constant until a sharp knee is reached. These are no longer generally available (but I'd be happy to buy a few PX-13Bs from someone with spare stock).

The replacements offered for the mercury cells are zinc-air cells, which have a long shelf-life and are activated when a patch is removed from the battery, allowing air to enter the cell. These batteries also have a flat discharge curve, but don't last as long as the mercury cells - though the life can be extended by replacing the patch on the cell when not in use. I'm told to allow 30 minutes from removing the patch for the

voltage of the cell to stabilize.

The point of this is that these cells may be ideal for voltage reference use; the typical voltage is 1.35V, and I've measured 1.35V on a PX-13B and 1.34V on a WeinCell MRB625 (which is the ZnO replacement). They're not cheap, about $6, and probably easiest to find at camera stores.

[For those that might be amused, I do most of my photography with a YashicaMat-124G even though I also have an 35mm SLR, a Nikon P&S and a video camera. Kinda like using QRP... ;-) ]